

**COOPERATIVE AGREEMENT
BETWEEN
ENVIRONMENTAL PROTECTION AGENCY,
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
SAN JUAN BASIN HEALTH DEPARTMENT
FOR
HEALTH BASED ENVIRONMENTAL MANAGEMENT OF ANIMAS RIVER**

This agreement (Agreement) is entered into by the Environmental Protection Agency, an executive agency of the U.S. federal government, hereinafter referred to as the "EPA," Colorado Department of Public Health and Environment, hereinafter referred to as "CDPHE", and the San Juan Basin Health Department, an independent political subdivision of the State of Colorado, hereinafter referred to as "SJBH".

ARTICLE I – BACKGROUND AND OBJECTIVES

A. Local Public Health Environmental Health requirements: Recognizing that significant responsibility for environmental quality management and oversight lies with State and Federal agencies, local public health is required to participate in the protection and improvement of air, water, land, and food quality by identifying, investigating, and responding to community environmental health concerns, reducing current and emerging environmental health risks, preventing disease, and sustaining the environment. These activities shall be consistent with applicable law and regulations, and coordinated with local, state and federal agencies, industry and the public. Local public health requirements include but, are not limited to:

1. Identify and mitigate vector-borne, air-borne, water-borne and other public health threats related to environmental hazards.
2. Take appropriate steps to support the protection of surface water and ground water, including recreational waters and drinking water sources.
3. Take appropriate steps to assure proper storage, collection, treatment and disposal of solid and hazardous waste.
4. Encourage decisions that promote positive public health outcomes and protect and improve air quality, water quality and solid waste management.
5. Where appropriate and practicable, enter into contracts or other acceptable agreements with the State's environmental programs in order perform local assessments, inspections, investigations and monitoring programs.

B. Local Public Health Emergency Preparedness and Response requirements: local public health is required to prepare and respond to emergencies with a public health or environmental health implication in coordination with local, State, and Federal agencies and public and private sector partners. Local public health

requirements include but, are not limited to:

1. Participate in All-Hazards planning, training, exercises and response activities with the local jurisdiction.
2. Serve as the FEMA “Emergency Support Function 8 – Public Health” lead for the jurisdiction.
3. Implement an emergency communications strategy to inform the community to activate emergency personnel in the event of a public health crisis.
4. Coordinate with county Emergency Managers and other first responders.
5. Promote community preparedness by communicating steps that can be taken before, during or after a disaster.

C. Local Public Health Assessment, Planning and Communications requirements: Local public health is required to use assessment and planning methodologies to identify, evaluate and understand community health problems, priority populations, and potential threats to the public’s health, and use this knowledge to determine what strategies are needed to engage partners and improve health.

D. Under this agreement, the parties will cooperate in environmental health monitoring and improvement activities; emergency preparedness and response activities; and assessment, planning and communications activities related to the Gold King Mine spill, which occurred on August 5, 2015 and impacted the Animas River and the communities downstream from the Gold King Mine, and associated treatment and/or removal actions that are ongoing in the Upper Animas Mining District. The parties agree to cooperate in activities related to assessing, reporting, and providing public and environmental health related information, and implementing improvements to public health, to communities within SJBH scope of authority.

E. This agreement has been prepared to document the requirements and procedures which are intended to provide independent ability for SJBH to monitor and prevent unacceptable human and environmental exposure to contaminants that have been associated with the Gold King Mine spill which impacted the Animas River in and near La Plata County, Colorado. Specifically, the agreement addresses the responsibilities of the SJBH in relation to the Animas River and any such Institutional Controls (IC) necessary to ensure human health is protected. The Plan does not supersede any federal, state, or local regulations or ordinances pertaining to the environment. The IC are intended to protect the public from contact with surface and groundwater containing unacceptable levels of heavy metals including lead, arsenic, manganese, and from contact with surface soil impacted with lead and/or arsenic.

ARTICLE II - AUTHORITY

EPA enters into this Agreement pursuant to:

- A. [EPA implementing statute and fiscal authority].

CDPHE enters into this Agreement pursuant to:

- A.

SJBH enters into this Agreement pursuant to:

- A. SJBH derives authority from C.R.S. 25-1-506, the Public Health Agency implementing statute.
- B. SJBH bylaws as established by the San Juan Basin Board of Health.
- C. Master Contract between CDPHE and SJBH to provide services as established by the State Board of Health.

ARTICLE III – SCOPE AND STATEMENT OF WORK

Substantial involvement by the EPA and CDPHE is anticipated during the performance of activities funded under this agreement. The parties agree that the SJBH will perform functions in the following areas. Below are example activities in order to address objectives in Article I. Additional activities may be required.

- A. As it relates to the Gold King Mine Spill and ongoing treatment or removal actions in the Upper Animas Mining District, protection and improvement of air, water, land, and food quality by identifying, investigating, and responding to community environmental health concerns, reducing current and emerging environmental health risks, preventing disease, and sustaining the environment. Activities may include, but are not limited to:
 - 1. Assist EPA with long-term monitoring of the Animas River watershed. Review Sampling and Analysis Plans submitted by developers. Activities may include, but are not limited to:
 - i. SJBH will provide input into EPA's long-term Watershed Monitoring Plan.
 - ii. SJBH, will assist with maintenance of monitoring equipment, coordinate the release of data to the community, and provide data interpretation. In the event of monitoring results that exceed water quality triggers as defined by SJBH, EPA and partner agencies, SJBH will coordinate a community response in cooperation with local partners.
 - iii. SJBH will, where necessary, perform additional sampling actions to augment those undertaken by EPA and its contractors.

Where appropriate, SJBH will perform split sampling with EPA and its contractors.

- iv. SJBH will provide public health-related follow-up based on sampling results. These actions may include, but are not limited to, investigations of homes or communities with high analyte concentrations, human toxicology sampling in affected areas, and communicating sampling results to the community.
- v. SJBH will perform monitoring actions not included in the EPA Watershed Monitoring Plan. These actions may include, but are not limited to, sampling of groundwater wells and public water systems, and maintain communications with water users in the Animas watershed. SJBH may also reimburse institutions who perform additional monitoring actions if approved by EPA.
- vi. SJBH will maintain a database of groundwater and/or surface water sampling results, and coordinate delivery of samples to certified laboratories for testing.
- vii. SJBH will reimburse public water systems and local institutions who incurred additional sampling, operations or cleanup costs as a result of the Gold King Mine release.

2. Communicate and educate the public on the characteristics and risks of heavy metals and other contaminants related to the Gold King Mine spill. Activities may include, but are not limited to:

- i. SJBH has limited educational programs in place which include environmental health and science. The program will be expanded to offer the public specific information on heavy metals relevant to the Gold King Mine spill, including a discussion of action levels and potential exposure risks.
- ii. SJBH will begin an outreach program to contact and provide information to households using private drinking water wells. These constituents are at the highest risk of human health impacts from drinking water quality degradation from the presence of heavy metals. SJBH will deliver information encouraging these residents to install and maintain filtration systems, and regularly inspect and test wells.
- iii. SJBH maintains a web page, where citizens can research information about the Gold King Mine spill, potential sediment and groundwater impacts, and the associated risks. Maps showing local soil and groundwater concentrations of heavy metals will be archived and available at the SJBH web page.
- iv. SJBH will create FAQ documents for distribution via the SJBH website and physical distribution for specific user groups, including, but not limited to, boaters, swimmers, fishermen, irrigators, livestock owners, private well owners, and drinking

water systems. These FAQ documents will address potential health risks that these users may encounter following the Gold King Mine spill. Where appropriate, SJBH will contract with subject matter experts, including, but not limited to, sportsmen's groups, boating or rafting associations, irrigation and livestock specialists, and groundwater hydrology experts, to develop FAQ communications for specific user groups.

- v. SJBH will create a communications plan to answer public questions in the event that a crisis situation develops at the Gold King Mine or neighboring mines. These situations may include, but are not limited to, unexpected releases of mine waste, high runoff events that disturb Gold King Mine-derived sediments or raise Animas River turbidity, and changes in water chemistry. This plan will be shared with EPA, CDPHE, and local authorities to facilitate a quick public information response to future unexpected events.
- vi. SJBH staff will respond to specific inquiries from citizens and local policymakers regarding water quality concerns, sediment composition and transport concerns, and

- 3. Contract technical support as needed from relevant entities such as, but not limited to: U.S. Agency for Toxic Substance and Disease Registry, U.S. Geological Survey, the U.S. Department of Agriculture, and/or the U.S. Fish and Wildlife Service.
- 4. Participate as a local representative in the CDPHE Water Quality Control Division Task Force on Mine Land and Stream Restoration.

B. As it relates to the Gold King Mine Spill and ongoing treatment or removal actions in the Upper Animas Mining District, prepare and respond to emergencies with a public health or environmental health implication in coordination with local, State, and Federal agencies and public and private sector partners. Activities may include, but are not limited to:

- 1. Emergency communications strategy and public preparedness communications. See above Article III.A.2.
- 2. Participate as a local representative in the CDPHE and EPA Work Groups on Comprehensive Watershed Emergency Alert and Notification planning.

C. As it relates to the Gold King Mine Spill and ongoing treatment or removal actions in the Upper Animas Mining District, use assessment and planning methodologies to identify, evaluate and understand community health problems, priority populations, and potential threats to the public's health. See above (Article III.A.1). Activities may include, but are not limited to:

1. SJBH will provide public health-related follow-up based on sampling results. These actions may include, but are not limited to, investigations of homes or communities with high analyte concentrations, human toxicology sampling in affected areas, and communicating sampling results to the community.
2. SJBH will, when requested, sample (or contract with the appropriate organization for sampling) drinking water wells, surface water intakes, agricultural and residential soils, or human health conditions for heavy metals and other contaminants.
3. SJBH will, when requested by residents, share the cost of installing Point of Entry reverse osmosis systems, as recommended by EPA Region 8 toxicologists, with low-income households (defined for SJBH's programs as those households earning below 250% of the federal poverty line).

D. It is anticipated that costs incurred under this agreement by SJBH will include, but are not limited to: staff time; personnel costs (including potential hiring process costs); training (e.g. environmental enforcement and sampling, EPRS, PIO/communications, web development/software); travel costs (e.g. for staff training, staff work group participation, travel to requesting citizens properties for investigation and sampling, and for transportation of samples to laboratory for analysis); equipment; costs of contracted laboratory analysis; costs of subcontracted technical work and/or communications specialists.

ARTICLE IV – TERM OF AGREEMENT

The Agreement will become effective upon the date of the last signature and will expire September 30, 2016. The period from the effective date to the expiration date is the period of performance for the Agreement.

ARTICLE V - BUDGET:

See attached budget spreadsheet.